



# Corrigendum No. - 3

# Tender Enquiry No- TPSODL/OT/2023-24/040

**Work Description** - Engineering, Supply, Erection & Commissioning of Multiple Projects under SDMF-II on "Turnkey Contract Basis".

- 1) The description of line item number 2.1(iv), 2.2(v) of revised **BoQ** (Annexure -1) are changed and the revised **BoQ** is attached separately. All bidders are requested to quote their prices in the revised BoQ only.
- 2) The payment term of the tender is changed and the new payment term is mentioned below.

### 7.2 Payment Terms

Prices shall remain Firm throughout the contract period.

## **Payment Term:**

The payment shall be payable within thirty (30) days of receipt of the Contractor's invoice, subject to fulfillment of all the conditions for release of such payment.

#### For Supply

- i. 60% on account payment of the total of item wise cost of Release Order (RO) shall be paid against receipt of material at site in good condition and certification by TPSODL along with bills complete in all respects & submission of the following documents:
  - a. Acceptance of RC & RO.
  - b. Submission of applicable Contract Performance Bank Guarantee.
  - c. Insurance policy as per tender including GPA policy as per TPSODL GCC.
  - d. Pert Chart approved by TPSODL EIC, Field Quality Plan and submission of a true copy of 'Erection All Risk Insurance Policy' taken for the awarded jobs
  - e. Submission of error free E- Invoice.
  - f. Manufacturer's / Contractor's guarantee certificate of Quality.
  - g. Submission of certificate on measurement book by Project Manager that materials under consideration been delivered as per technical specification, scope of work & approved drawings.
  - h. MDCC Issued by TPSODL.
- ii. 30% on account payment of the actual executed value against the supplied items of the RO shall be paid against mechanical completion of erection.

#### **Erection**

90% on account payment of the actual executed value of the RO shall be paid against the service line item and composite line item for Civil works, upon submission of the following documents:



- a. Submission of error free E- Invoice.
- b. Manufacturer's / Contractor's guarantee certificate of Quality.
- c. Submission of certificate on measurement book by Project Manager that materials under consideration have been erected, tested and commissioned as per technical specification, scope of work & approved drawings.

### Supply + Erection

4. 10 % payment of the actual executed works of all Release Orders of the RC shall be paid after successful completion of acceptance test and Taking Over of the complete systems specified in the enquiry, including clearance of Electrical Inspectorate, compliance of final punch point and after reconciliation & adjustment of payments (if any), towards Quantities of materials executed by the contractor.

Responsibility of watch & ward of the materials till complete handing over shall be in the scope of BA. If during reconciliation some discrepancies are observed, BA shall reinstate the works without any additional cost implication to TPSODL and within the stipulated timelines.

#### Note-

- A. BA should have completed execution of that part of contract, for which payment is sought, to the satisfaction of TPSODL's Engineer-in-Charge responsible for the contract and obtained certification for execution of the work.
- B. BA has undertaken joint measurement of the work executed along with TPSODL's Engineer-in-charge
- C. BA's bills/invoices submitted have been certified by Engineer-In-Charge.
- D. Payment shall be released within 30 days from the date of submission of certified bills/ invoices with complete details and fulfilment of statutory compliances and other requirements, if any.
- E. E- Invoice Clause: The Central Board of Indirect Taxes and Customs vide Notification No. 10/2023 Central Tax dated 10th
  - May, 2023 have notified the mandatory issuance of E-Invoices w.e.f. 1st August 2023 for those suppliers whose turnover during previous years have exceeded Rs.5crs. In view of the aforesaid notification your office is required to issue Tax Invoice with appropriate IRN (Invoice Reference Number) and QR Code printed on the face of the invoice. Please note invoices issued without IRN and QR code if applicable to your organization will be rejected, as the same is not considered as a valid Tax Invoice.
- F. GST Reimbursement Clause: As per GST law, the supplier/BA has to issue Tax Invoice along with supply of goods and in case of services within 30 days from the date of supply of service. The GST amount billed in the Tax Invoice has to be deposited first by your organization. In case, your organization doesn't deposit GST with Govt. treasury on/before prescribed due date, we reserve the right to withheld GST amount till the time it reflected in GSTR-2A / GSTR-2B of company portal.

Warms Regards,

Shubhranshu Shekhar Sahu

TP SOUTHERN ODISHA DISTRIBUTION LIMITED

(A Tata Power and Odisha Government Joint Venture)

Courtpeta | Berhampur | Ganjam | Odisha - 760 004.

Note-This document does not require signature.

#### Replies of additional pre-bid queries

#### Tender NTPSODL/OT/2023-24/040

Package Rate Contract for "Engineering, Supply, Erection & Commissioning of Multiple Projects under SDMF-II on "Turnkey Contract Basis".

Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response	
1	2	3	4	5	
1		SI. 2.1 Erection,Testing and Commissioning of Following Equipments/Materials For 11kV 3C, 400sqmm UG Cable (As Per Technical Specification And Scope Of Work)		Please read the description as follows:	
2		iv) Supply, Installation, Laying, Commissioning, Testing of 11kV, 3core, 1Run, 400sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable in HDD method with HDPE pipe (160mm dia, PN8 PE80) for laying of individual run of UG cable at main road and unaccessable place.	The description mentioned under ErectionTesting and Commissioning of Following Equipments/Materials For 11kV 3C, 400sqmm UG Cable at SL 2.1.  Our query is, again rate to be quoted for supply of 11 KV 3Core 400 sqmm UG Cable 10000 Mtr ? Because at Sl. No 1.1 of BOQ rate to be quoted for supply of 11kV, 3Core, 400sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 37.7kA and SC rating of Armour in kA- 15kA) 25000 Mtr.  Please confirm.	Installation, Laying, Commissioning, Testing of 11kV, 3core, 1Run, 400sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable in HDD method with HDPE pipe (160mm dia, PN8 PE80) for laying of individual run of UG cable at main road and unaccessable place.	
3		2.2 Erection,Testing and Commissioning of Following Equipments/Materials For 11kV 4WAY RMU with FRTU for RMU SCADA Automation (As Per Technical Specification And Scope Of Work)			
5		v) Supply of 11kV RMU 4 Way, 2 Iso & 2 Brk 630A (LLVV) - 22 nos	Again price to be quoted for 11kV RMU 4 Way, 2 Iso & 2 Brk 630A (LLVV) - 22 nos ? Because at SI. No 1.2 (iii) same description is mentioned.	ITC of 11kV RMU 4 Way, 2 Iso & 2 Brk 630A (LLVV) - 22 nos	
6		SI.No-3 Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for 1kV 3C, 400sqmm UG Cable,11kV 4WAY RMU with FRTU for RMU SCADA Automation,11 KV line DP with AB Switch			
7		v) Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.) - 400 Mtr	Is rate to be quoted for both the items_separately?	Yes	
8		x) Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.) - 704 Mtr	Request to clarify .		

# Annexure- I (Amended Schedule for Items) Engineering, Supply, Erection & Commissioning of Multiple Projects under SDMF-II

SL No.	Description	Unit	Qty (A)	Unit Price (Rs.)	GST @ 18% (C)	Unit Price - All Inclusive (Rs.)	Total Amount (All Inclusive) (Rs.)
				(B)		(D = B+C)	(E = A x D)
1.1	Supply of Following Equipments/Materials for 11kV 3C, 400sqmm UG Cable						
	(As Per Technical Specification And Scope Of Work)						
1	Supply of 11kV, 3Core, 400sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 37.7kA and SC rating of Armour in kA- 15kA)	Mtr	25000.00		0.00	0.00	0.00
"	Supply of <b>Straight through jointing kits</b> Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, Aluminium UG cable for 3Core (Set)	Set	100.00		0.00	0.00	0.00
	Supply of <b>Outdoor termination kits</b> Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, HT UG cable for 3Core (Set)	Set	50.00		0.00	0.00	0.00
iv	Supply of <b>HDPE</b> PE 80-PN8 pipe of <b>160mm</b> diameter (for 400sqmm HT cable laying)	Mtr	15000.00		0.00	0.00	0.00
4.2	Supply of Following Equipments/Materials for 11kV 4WAY RMU with FRTU for RMU SCADA Automation						
1.2	(As Per Technical Specification And Scope Of Work)						
	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, HT UG cable for 3Core (Set)	Set	88.00		0.00	0.00	0.00
	Supply of <b>Outdoor termination kits</b> Heat Shrinkable type suitable for 11kV, 3Core, 400 sqmm, HT UG cable for 3Core (Set)	Set	88.00		0.00	0.00	0.00
iii	Supply of 11kV RMU 4 Way, 2 Iso & 2 Brk 630A (LLVV)	Nos.	22.00		0.00	0.00	0.00
iv	Earthing Conductor: 50X6 mm (2.4kg./mtr.) GI Flat for equipment, structure etc.)	kg	290.40		0.00	0.00	0.00
V	Pipe Earthing 40mm. Gl Pipe	Nos.	44.00		0.00	0.00	0.00
vi	Pre-Wired FRTU Panel with FRTU	No.	22.00		0.00	0.00	0.00
vii	Managed Layer2 Ethernet Switch (FRTU Panel)	No.	22.00		0.00	0.00	0.00
viii	Networking Accessories	No.	22.00		0.00	0.00	0.00
ix	CMR with Mounting Base for Digital Inputs	Nos.	704.00		0.00	0.00	0.00
Х	Interposing Relay for Digital Output	Nos.	352.00		0.00	0.00	0.00
xi	Battery Charger	Nos.	22.00		0.00	0.00	0.00
xii	Battery	Nos.	22.00		0.00	0.00	0.00
xiii	4G Modem cum Router	Nos.	22.00		0.00	0.00	0.00
xiv	Instrumentation Cable 12 C X 0.5 mm2, Armored cable for Status and Indications	Mtr.	880.00		0.00	0.00	0.00
XV	Instrumentation Cable 7 C X 1.5 mm2, Armored for Control Output	Mtr.	880.00		0.00	0.00	0.00
xvi	Twisted Pair Shielded & Over all shielded Instrumentation Cable 5 P X 1.0 mm2, Armored for Analog Input	Mtr.	880.00		0.00	0.00	0.00
xvii	4 C X 2.5 mm2 Copper cable for extension of CT & PT	Mtr.	440.00		0.00	0.00	0.00
xviii	2 C X 4 mm2 Cable for DC Power Supply	Mtr.	220.00		0.00	0.00	0.00
xix	4P X 0.36 mm2, Armored Communication Cable for MFM	Mtr.	440.00		0.00	0.00	0.00
XX	Armored CAT6 SFTP Cable	Mtr.	440.00		0.00	0.00	0.00
xxi	Un-Armored CAT6 SFTP Cable	Mtr.	440.00		0.00	0.00	0.00
xxii	Multi Function Meter	Nos.	44.00		0.00	0.00	0.00
1.3	Supply of Following Equipments/Materials for 11 KV line DP with AB Switch (As Per Technical Specification And Scope Of Work)						
i	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	64.00		0.00	0.00	0.00
	Top Channel 100X50X6mm, 9.56 KG/Mtr., each channel length 3 mtr., 2 no's channel required =( 2x9.56x3)	KG	1835.52		0.00	0.00	0.00
	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	126.88		0.00	0.00	0.00

iv	AB switch Mounting Channel 75X40X4.8mm, 7.14KG/Mtr, each channel length 3 Mtr., 2 no's channel required = (7.14x3x2)	KG	1370.88	0.00	0.00	0.00
V	AB Switch Side Support Channel 100X50X6mm,9.56 KG/Mtr., each channel length 0.35 mtr., 2 no's channel required =( 9.56x2x0.35)	KG	214.15	0.00	0.00	0.00
vi	Channel Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr., 1 no's channel required = (7.14x0.8x1)	KG	182.79	0.00	0.00	0.00
vii	Double Pole Belting Channel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 3.0 Mtr., 4 no's channel required = (7.14x3x4)	KG	2741.76	0.00	0.00	0.00
viii	50x50x6mm.Gl Bracing Angle, 4.5Kg./mtr., each angle length 3.512 mtr., 4 nos angle required = (4.5x3.512x4)	KG	2022.92	0.00	0.00	0.00
ix	Danger Plate, 2 no's.	No.	64.00	0.00	0.00	0.00
х	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	19.26	0.00	0.00	0.00
xi	H.T. Stay clamp, 50x8 mm. flat, 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	Pair	64.00	0.00	0.00	0.00
xii	H.T. Stay set (Complete )	Set	64.00	0.00	0.00	0.00
xiii	H.T. Stay Insulator Type-C	No.	64.00	0.00	0.00	0.00
xiv	7/10 SWG Stay Wire 15kg /stay	K.g.	960.00	0.00	0.00	0.00
XV	Gi Pipe Earthing 40mm. 3 Mtr. Long	No.	64.00	0.00	0.00	0.00
xvi	50x6mm GI Flat for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	KG	1548.16	0.00	0.00	0.00
xvii	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	Kg	192.00	0.00	0.00	0.00
xviii	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 8 no's = (8x0.59x0.51	KĞ	77.04	0.00	0.00	0.00
xix	Lightning Arrester(12KV,10KA) (Station Class,class-2)	EA	96.00	0.00	0.00	0.00
XX	AB Switch (11KV,400A.3pole,50Hz)	Set	32.00	0.00	0.00	0.00
xxi	11 KV pin insulator polymer	No.	96.00	0.00	0.00	0.00
xxii	H W fitting(B&S) 70KN, 3Bolt	No.	192.00	0.00	0.00	0.00
xxiv	Disc insulator (B&S) 70 KN polymer	No.	192.00	0.00	0.00	0.00
XXV	PG Clamp for 100 sq.mm AAA conductor	NO.	192.00	0.00	0.00	0.00
xxvi	GI Nut , Bolt & Washer of different sizes (13.718 Kg each DP with AB Switch)	K.g.	438.98	0.00	0.00	0.00
XXVII	Black Paint	Ltr	32.00	0.00	0.00	0.00
		Ltr	64.00	0.00	0.00	0.00
xxviii	Yellow Colour Paint for Background  Erection, Testing and Commissioning of Following Equipments/Materials For 11kV 3C, 400sqmm UG	Lu	64.00	0.00	0.00	0.00
2.1						
i	Cable (As Per Technical Specification And Scope Of Work)  Laying, Commissioning, Testing of 11kV, 3core, 400sqmm, aluminium, XLPE insulation armoured	Mtr.	15000.00	0.00	0.00	0.00
ii	(extruded type) UG cable by open trench method.  Erection of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set)	Set	100.00	0.00	0.00	0.00
iii	Erection of <b>Outdoor termination kits</b> Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set)	Set	50.00	0.00	0.00	0.00
iv	Installation, Laying, Commissioning, Testing of 11kV, 3core, 1Run, 400sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable in <b>HDD method with HDPE pipe</b> (160mm dia, PN8 PE80) for laying of individual run of UG cable at main road and unaccessable place.	Mtr.	10000.00	0.00	0.00	0.00
v	Laying of <b>160mm dia</b> PE 80-PN8, <b>HDPE pipe</b> inside open trench.	Mtr.	15000.00	0.00	0.00	0.00
2.2	Erection, Testing and Commissioning of Following Equipments/Materials For 11kV 4WAY RMU with FRTU for RMU SCADA Automation (As Per Technical Specification And Scope Of Work)					
i	Erection of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set)	Set	88.00	0.00	0.00	0.00
ii	Erection of <b>Outdoor termination kits</b> Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits for 3core (set)	Set	88.00	0.00	0.00	0.00
iii	Erection of 11kV RMU 4 Way, 2 Iso & 2 Brk 630A (LLVV)	Nos.	22.00	0.00	0.00	0.00
iv	Services of FRTU Panel, Communication and Other Supplied System	EA	22.00	0.00	0.00	0.00
V	11kV RMU 4 Way, 2 Iso & 2 Brk 630A (LLVV)	Nos.	22.00	0.00	0.00	0.00
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vi	Earthing Conductor: 50X6 mm (2.4kg./mtr.) GI Flat for equipment, structure etc.)		290.40	0.00	0.00	0.00
	Pipe Earthing 40mm. GI Pipe		44.00	0.00	0.00	0.00
viii	Pre-Wired FRTU Panel with FRTU		22.00	0.00	0.00	0.00
ix	Managed Layer2 Ethernet Switch (FRTU Panel)	No.	22.00	0.00	0.00	0.00
x	Networking Accessories		22.00	0.00	0.00	0.00
xi	CMR with Mounting Base for Digital Inputs		704.00	0.00	0.00	0.00
xii	Interposing Relay for Digital Output	Nos.	352.00	0.00	0.00	0.00
xiii	Battery Charger	Nos.	22.00	0.00	0.00	0.00
xiv	Battery	Nos.	22.00	0.00	0.00	0.00
XV 4	4G Modem cum Router	Nos.	22.00	0.00	0.00	0.00
xvi	Instrumentation Cable 12 C X 0.5 mm2, Armored cable for Status and Indications	Mtr.	880.00	0.00	0.00	0.00
xvii	Instrumentation Cable 7 C X 1.5 mm2, Armored for Control Output	Mtr.	880.00	0.00	0.00	0.00
xviii	Twisted Pair Shielded & Over all shielded Instrumentation Cable 5 P X 1.0 mm2,Armored for Analog Input	Mtr.	880.00	0.00	0.00	0.00
xix 4	4 C X 2.5 mm2 Copper cable for extension of CT & PT	Mtr.	440.00	0.00	0.00	0.00
XX 2	2 C X 4 mm2 Cable for DC Power Supply	Mtr.	220.00	0.00	0.00	0.00
	4P X 0.36 mm2, Armored Communication Cable for MFM	Mtr.	440.00	0.00	0.00	0.00
xxii	Armored CAT6 SFTP Cable	Mtr.	440.00	0.00	0.00	0.00
xxiii	Un-Armored CAT6 SFTP Cable	Mtr.	440.00	0.00	0.00	0.00
xxiv	Multi Function Meter	Nos.	44.00	0.00	0.00	0.00
	Erection, Testing and Commissioning of Following Equipments/Materials For 11 KV line DP with AB					
2.3	Switch (As Per Technical Specification And Scope Of Work)					
i	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	64.00	0.00	0.00	0.00
ii '	Top Channel 100X50X6mm, 9.56 KG/Mtr., each channel length 3 mtr., 2 no's channel required =( 2x9.56x3)	KG	1835.52	0.00	0.00	0.00
iii	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	126.88	0.00	0.00	0.00
IV	AB switch Mounting Channel 75X40X4.8mm, 7.14KG/Mtr, each channel length 3 Mtr., 2 no's channel required =( 7.14x3x2)	KG	1370.88	0.00	0.00	0.00
V	AB Switch Side Support Channel 100X50X6mm,9.56 KG/Mtr., each channel length 0.35 mtr., 2 no's channel required =( 9.56x2x0.35)	KG	214.15	0.00	0.00	0.00
VI	Channel Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr., 1 no's channel required =( 7.14x0.8x1)	KG	182.79	0.00	0.00	0.00
VII	Double Pole Belting Channel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 3.0 Mtr., 4 no's channel required = (7.14x3x4)	KG	2741.76	0.00	0.00	0.00
VIII	50x50x6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 3.512 mtr., 4 nos angle required = (4.5x3.512x4)	KG	2022.92	0.00	0.00	0.00
ix	Danger Plate, 2 no's.	No.	64.00	0.00	0.00	0.00
	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	19.26	0.00	0.00	0.00
	H.T. Stay clamp, 50x8 mm. flat, 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required ( 1 Pair)	Pair	64.00	0.00	0.00	0.00
	H.T. Stay set (Complete )	Set	64.00	0.00	0.00	0.00
	H.T. Stay Insulator Type-C	No.	64.00	0.00	0.00	0.00
	7/10 SWG Stay Wire 15kg /stay	K.g.	960.00	0.00	0.00	0.00
	Gi Pipe Earthing 40mm. 3 Mtr. Long	No.	64.00	0.00	0.00	0.00
XVI	50x6mm GI Flat for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	KG	1548.16	0.00	0.00	0.00
	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	Kg	192.00	0.00	0.00	0.00
	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 8 no's = (8x0.59x0.51	KG	77.04	0.00	0.00	0.00
	Lightning Arrester(12KV,10KA) (Station Class,class-2)	EA	96.00	0.00	0.00	0.00
XX /	AB Switch (11KV,400A.3pole,50Hz)	Set	32.00	0.00	0.00	0.00
xxi	11 KV pin insulator polymer	No.	96.00	0.00	0.00	0.00

xxii	H W fitting(B&S) 70KN, 3Bolt	No.	192.00	0.00	0.00	0.00
xxiv	Disc insulator (B&S) 70 KN polymer	No.	192.00	0.00	0.00	0.00
xxv	PG Clamp for 100 sq.mm AAA conductor		192.00	0.00	0.00	0.00
xxvi	GI Nut , Bolt & Washer of different sizes (13.718 Kg each DP with AB Switch)		438.98	0.00	0.00	0.00
xxvii	Black Paint	Ltr	32.00	0.00	0.00	0.00
xxviii	Yellow Colour Paint for Background	Ltr	64.00	0.00	0.00	0.00
	Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and					
3	labour, T&P, etc for 1kV 3C, 400sqmm UG Cable,11kV 4WAY RMU with FRTU for RMU SCADA					
	Automation,11 KV line DP with AB Switch					
i	Earth work excavation of <b>soil</b>	Cum	10500.00	0.00	0.00	0.00
ii	Earth work excavation of hard rock	Cum	4500.00	0.00	0.00	0.00
iii	Back filling with excavated soil outside and above the trench	Cum	15000.00	0.00	0.00	0.00
iv	Damage of asphalt/tar road and other utilities and reconstructing to bring to its original shape after laying of cable in open trench (1mtr. width)	Mtr	8250.00	0.00	0.00	0.00
V	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	Mtr	400.00	0.00	0.00	0.00
vi	Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works	Nos.	833.00	0.00	0.00	0.00
vii	Prefabricated RCC foundation of 11kV RMU	Nos.	22.00	0.00	0.00	0.00
viii	Supply of GI Fencing with Gate around each <b>RMU</b>	sqmtr	40.00	0.00	0.00	0.00
ix	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation, soil treatment with bentonide powder, calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe.	Set	44.00	0.00	0.00	0.00
х	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	Mtr	704.00	0.00	0.00	0.00
xi	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts BA will do the excvation including excvation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material as per TPCODL Drawing & Standard.	No.	64.00	0.00	0.00	0.00
xii	Concreting ratio 1:1.5:3 (500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.mtr	28.80	0.00	0.00	0.00
xiii	Couping ratio 1:1.5:3 with dimension (500X500X450)= 0.1125 Cu mtr	Cu.mtr	7.20	0.00	0.00	0.00
xiv	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation, soil treatment with bentonide powder, calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe.	No.	64.00	0.00	0.00	0.00